

# **Communicable Disease Curriculum for Child Care Providers**



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# Abuse/Neglect

**Description:** Child abuse is a harmful act against a child. Neglect is the failure to act on behalf of the child. Child abuse and neglect can affect the physical and psychological growth and development of the child. Child abuse/neglect happens in all cultural, ethnic and income groups. Child abuse can be physical, emotional, verbal or sexual; child neglect can be physical or emotional. Abuse may cause serious injury to the child and may even result in death.

**Symptoms:** Signs of possible abuse include:

## **Physical Abuse:**

- Unexplained or repeated injuries such as welts, bruises or burns.
- Injuries that are in the shape of an object (belt buckle, electrical cord, etc.).
- Injuries not likely to happen given the age or ability of the child. For example, broken bones in a child too young to walk or climb.
- Disagreement between the child's and the parent's explanation of the injury.
- Unreasonable explanation of the injury.
- Obvious neglect of the child (dirty, undernourished, inappropriate clothes for the weather, lack of medical or dental care).
- Fearful behavior.

## **Emotional/Verbal Abuse:**

- Aggressive or withdrawn behavior.
- Shying away from physical contact with parents or adults.
- Afraid to go home.

## **Sexual Abuse:**

- Child tells you he/she was sexually mistreated.
- Child has physical signs such as:
  - Difficulty in walking or sitting.
  - Stained or bloody underwear.
  - Genital or rectal pain, itching, swelling, redness or discharge.
  - Bruises or other injuries in the genital or rectal area.
- Child has behavioral and emotional signs such as:
  - Difficulty eating or sleeping.
  - Soiling or wetting pants or bed after being potty trained.
  - Acting like a much younger child.
  - Excessive crying or sadness.
  - Withdrawing from activities and others.
  - Talking about or acting out sexual acts beyond normal sex play for age.

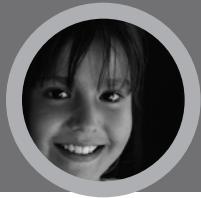
**Responsibilities of Parents and Caregivers:** Child care workers are mandated by law to report any suspicions of child abuse and/or neglect. This can be done 24 hours a day, seven days a week, from anywhere in Ohio. Report your concerns/findings to the local county children services agency or local law enforcement agency. Reporting of suspected child abuse or neglect is completely confidential.

If child abuse is suspected, follow these guidelines:

- Take the child to a quiet, private area.
- Gently encourage the child to talk.
- Remain calm so as not to upset the child.
- If the child reveals the abuse, reassure the child that he/she is believed, and was right to tell.
- Tell the child someone will be able to help.
- Return the child to the group (if appropriate).
- Record all information.

**Comments:** Abuse can happen in any family, regardless of any special characteristics. However, in dealing with parents, be aware of characteristics of families in which abuse may be more likely:

- Families who are isolated and have no friends, relatives, church or other support system.
- Parents who were abused as a children.
- Families who are often in crisis or have a lot stress (have money problems, move often).
- Parents who abuse drugs or alcohol.
- Parents who are very critical of their child.
- Parents who are very rigid in disciplining their child.
- Parents who feel they have a difficult child.



# AIDS (Acquired Immunodeficiency Syndrome)

**Description:** AIDS is a disease caused by a virus called human immunodeficiency virus or HIV for short. The virus attacks the immune system and weakens it so the body cannot fight off infection caused by other germs.

**Symptoms:** "AIDS" refers to "full-blown" disease. Most people who have the HIV virus do not have any signs or symptoms of disease. It may be years before a person with HIV becomes symptomatic. However, persons who have the virus can still spread infection, even if it is "silent." When symptoms do appear in children, they may include weight loss and failure to grow, swelling of the lymph nodes, chronic diarrhea and sores that do not heal. If a child has any of these symptoms, it does not necessarily mean he has HIV infection - all of these symptoms can be found with other diseases, too. AIDS is the term used to describe the end stage of HIV disease when the person's immune system is so compromised other infections can take advantage of the opportunity and cause deadly complications.

**How it is Spread:** HIV is not easy to catch. It is spread through blood, semen and vaginal fluid. It is not spread through urine, stool, tears or saliva unless these fluids have blood in them. The virus is spread:

- 1.) Through contact with an infected person's blood such as sharing dirty needles for using drugs.
- 2.) By having sexual contact with a person who has the virus.
- 3.) From an infected mother to her unborn baby through the placenta or during the process of birth.
- 4.) From an infected mother breastfeeding her baby.
- 5.) By exposure to infected blood through a blood transfusion.

**You Cannot Get HIV by:**

- 1.) Hugging, shaking hands or kissing.
- 2.) Sharing plates, cups or silverware with an infected person.
- 3.) Using a telephone or toilet seat after someone who is infected.
- 4.) Sharing a swimming pool with someone who is infected.

Family members of HIV-positive individuals who share the same home have not been infected through casual contact in more than 20 years of the epidemic.

**Incubation Period:** Highly unpredictable – from several months to several years. Scientific evidence indicates the body begins to respond within hours of being infected. When we test people for HIV, we are not looking for the virus but the presence of antibodies (a substance that the body develops to respond to specific invading germs). For most people, it can take three months after exposure to HIV to develop enough antibodies to show up on an HIV test. The time between infection and showing symptoms is highly unpredictable and varies from person to person.

**How Long Can a Person Pass the Infection to Others?** Once a person gets HIV, it does not go away. The person can spread the infection to others for life. If the person's virus is well-managed on anti-HIV medications that they take regularly and consistently, it dramatically reduces the chance of spreading the infection to others.

**Responsibilities of Parents and Caregivers:**

Children who are infected with HIV may generally continue to be in a child care setting, unless the child bites or scratches other children. However, the child with HIV is at much greater risk of catching some other type of infection from the “healthy children.” This is because the child with HIV may not be able to fight off otherwise common germs. For example, a germ that causes a cold in a healthy child may cause pneumonia in the child with HIV.

**Control of Spread:**

- The common term for control of the spread of disease in child care is “standard precautions.” Some people infected with HIV don’t even know they are infected. For this reason, we need to take the same precautions with everyone. This means do not come in contact with the blood of another person with your bare skin. Keep disposable gloves handy and wear them if you have to wipe a bloody nose, for example. Clean the area appropriately and always wash your hands after you remove the gloves.
- As always, wash your hands after changing any child’s diaper, helping the child to use the bathroom, wiping his nose, etc. Clean and sanitize equipment and toys as you normally would. Use the same precautions necessary to prevent the spread of any blood-borne infection (including hepatitis B).

**Treatment:** Currently, there is no vaccine to prevent HIV. Some of the other infections that HIV-infected people get, such as pneumonia, can be treated with antibiotics or other drugs. Although there is no cure for HIV, there are now many drugs to assist in prolonging life expectancy.

**Comments:** It may take 12 to 18 months to establish the HIV status of infants born to HIV-positive mothers. This is due to the presence of the mother’s antibodies in the child during the first months of life. Therefore, the child care staff should use standard precautions for all children.



# Asthma

**Description:** Asthma is an inflammatory lung disease and is the most common chronic illness in children. During an asthma attack, the airways in the lungs become swollen and cause coughing. Most people with asthma can lead normal lives when their asthma is well managed. The exact causes of asthma are unknown. However, asthma symptoms can be made worse by respiratory infections, emotions, food allergies and environmental risk factors such as:

- Molds
- Pollen
- Pets (furry, hairy)
- Pests (cockroaches)
- Strong smells

**Symptoms:** The early signs of asthma include coughing, watery eyes, headache, stomachache, itchy or scratchy throat, feeling of tightness in the chest, sneezing or runny nose and feeling dizzy or tired. Wheezing is a common symptom but may not be heard without a stethoscope.

**Treatment:** Children with asthma may be prescribed control medications and/or rescue medications.

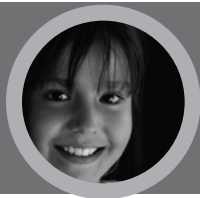
Control medications are given daily to help prevent asthma episodes by making airways less sensitive to triggers and to control swelling and inflammation inside the airways. Rescue medications are given when symptoms are present. Rescue medications work quickly and are given to relieve symptoms during an asthma episode and to open airways by relaxing muscles that are tight. Both types of medications may be given by a nebulizer or a metered-dose inhaler with a spacer.

## **Responsibilities of Parents and Caregivers:**

- The child care provider should be provided with, and keep on file, an asthma action plan for each child with asthma. An asthma action plan lists emergency information, asthma triggers, current medications being taken, medications to be administered by the child care provider and steps to be followed if the child has an asthma attack. Additional support from the child's health care providers should be available to the child care provider as needed.
- Find out what starts the child's asthma symptoms. Avoid those things in the child care center.

**Comments:** Free asthma training is available for child care providers. Call the Healthy Child Care Ohio Program at the Ohio Department of Health (614-644-8389).



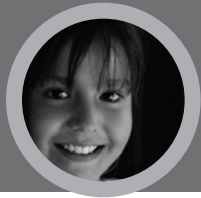


## Baby Bottle Tooth Decay/Early Childhood Caries

**Description:** Baby bottle tooth decay (or nursing bottle mouth)/ early childhood caries (ECC) is a leading dental problem for children under 3 years of age. Baby bottle tooth decay/ECC occurs when a child's teeth are exposed to sugary liquids such as formula, fruit juices and other sweetened liquids, for an extended period of time. The practice of putting a baby to bed with a bottle, which the baby can suck on for hours, is the major cause of this dental condition. According to child care licensing rules, a baby cannot be placed in a crib with a bottle or have a bottle propped during feeding. The sugary liquid flows over the baby's upper front teeth and dissolves the enamel, causing decay that can lead to infection. The longer the practice continues, the greater the damage to the baby's teeth and mouth. Treatment is very expensive.

**Responsibilities of Parents and Caregivers:** The American Academy of Pediatric Dentistry has developed the following guidelines for preventing baby bottle tooth decay/ECC:

- Don't allow a child to fall asleep with a bottle containing milk, formula, fruit juice or other sweet liquids.
- Never let a child walk with a bottle in her mouth.
- Comfort a child who wants a bottle between regular feedings or during naps with a bottle filled with cool water.
- Always make sure a child's pacifier is clean and never dip a pacifier in a sweet liquid.
- Introduce children to a cup as they approach 1 year of age. Children should stop drinking from a bottle soon after their 1st birthday.
- Notify the parent of any unusual red or swollen areas in a child's mouth or any dark spot on a child's tooth so the parent can consult the child's dentist.
- To prevent infections from spreading through germs found in saliva and blood on toothbrushes, see Using and Handling Toothbrushes.



# Chickenpox/Shingles

**Description:** This viral illness has sudden onset and begins with a small sore that becomes blister like for three or four days, then leaves a scab. Several crops of these blisters will come out over a period of days, so at any one time there will be sores in various stages of development. The rash tends to be more noticeable on the trunk than on exposed parts of the body and may appear inside the mouth, on the scalp and in the upper respiratory tract. Generally, a person gets this infection only once. Herpes zoster (shingles), caused by the same virus, is an eruption in someone previously infected. Someone infected with shingles can spread chickenpox to an exposed child who has never had chickenpox. This occurs if there is direct contact with the moist rash.

**Symptoms:** Fever, cough, fatigue and skin rash that progresses to blisters, then scabs.

**How it is Spread:** Chickenpox is highly contagious. It is spread by contact with the moist rash, droplet spread (such as occurs during coughing) and air-borne spread (being in the same room as a person with chickenpox).

It may be spread indirectly from contact with items soiled with the drainage from the sores.

**Incubation Period:** Ten-21 days, usually 14-16 days.

**How Long Can a Person Pass the Infection to Others?** From 1 to 2 days before the rash appears, through a maximum of six days after the vesicles appear. Scabs are not contagious. The presence or absence of fever has nothing to do with whether the person is contagious.

## Responsibilities of Parents and Caregivers:

- Inform parents the disease is present in the child care setting. Remind parents not to give their child aspirin.
- It is important to notify parents of children who are not immunized.
- Ask parents to notify caregiver if their child breaks out with chickenpox.
- Urge anyone with an impaired immune system or who might be pregnant to consult a physician about the need for special preventive treatment.

## Control of Spread:

- Contact the local health department because this is a Class A reportable disease. Please see the Ohio Department of Health (ODH) Communicable Disease Chart.
- Exclude until the sixth day after onset or until all lesions have crusted or there are no moist sores.
- Dispose of or sanitize articles soiled with nose and throat discharges.
- Wash hands after contact with soiled articles (tissues, etc.) or lesions.

**Treatment:** No specific treatment is available. If a medicine to lower temperature or reduce the discomfort is necessary, acetaminophen-containing medicine (such as Tylenol) is recommended. Children who develop fever after exposure to chickenpox should not be given aspirin. Aspirin appears to increase the risk of Reyes syndrome, a serious disorder characterized by sleepiness and vomiting that can lead to coma and death.

Vaccine given within 72 hours of exposure to chickenpox is 70 to 100 percent effective in preventing infection or modifying the severity of illness. **Vaccine:** Chickenpox vaccine is now available for children and is given between the ages of 12 – 18 months.



# Common Cold

**Description:** Common colds are caused by many different viruses. Children under age 5 may get colds several times each year.

**Symptoms:** Clear runny nose and eyes, sneezing, coughing, mild sore throat, chills, generalized discomfort with little or no fever.

**How it is Spread:** Colds are spread by direct contact, air-borne and indirectly from contaminated hands, tissues and other articles soiled by nose and throat discharge.

**Incubation Period:** Between 12 hours and five days, usually 48 hours.

**How Long Can a Person Pass the Infection to Others?** It can be spread about one day before symptoms begin and during the first five days of illness.

**Responsibilities of Parents and Caregivers:** Because the common cold can be caused by a number of different viruses, it is not necessary to notify all parents of every exposure. Exclusion of the child with the common cold is not necessary unless the child has a fever or does not feel well enough to participate.

**Control of Spread:**

- Teach the child to cover his mouth when sneezing or coughing.
- Dispose of tissues soiled with nose and throat discharges.
- Wash hands after contact with soiled tissues and articles and after contact with nose and throat discharge.
- Clean and sanitize all common surfaces and toys on a regular basis. (See: Cleaning and Sanitation Materials.)

**Treatment:** No specific treatment is available. Acetaminophen-containing medicines (such as Tylenol), The use of cough suppressants and decongestants should be decided by the child's physician. The effectiveness and safety of these two types of drugs are questioned for children under 24 months symptoms in children older than 3 months. Do not give aspirin.

**Comments:** Watch for new or more severe symptoms. They may indicate other more serious infections.



# Conjunctivitis (Bacterial)

**Description:** Inflammation of the white of the eye, with swelling of the lids and mucopurulent (pus) discharge.

**Symptoms:** Symptoms include the above symptoms, often accompanied by pain.

**How it is Spread:** Bacterial conjunctivitis can be spread by direct contact with secretions from the eye(s). This type of infection may also be spread indirectly through towels, washcloths, handkerchiefs and other objects that have been contaminated with secretions from the eye(s).

**Incubation Period:** Usually 24-72 hours.

**How Long Can a Person Pass the Infection to Others?** Persons with bacterial infection are contagious as long as the eye is draining.

**Responsibilities of Parents and Caregivers:**

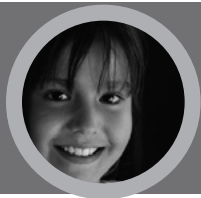
- The child should be seen by a physician for proper diagnosis and treatment if the symptoms include redness of the eye lid, purulent (pus) eye drainage, fever or pain.
- Parents should notify caregivers about their child's infection.

**Control of Spread:**

- The child with red eyelids, purulent (pus) eye discharge, pain or fever may return to child care after being evaluated by a physician and treated with antibiotics for 24 hours.
- The bacterial disease is easily spread by contact with discharge from the eye.
- Good personal hygiene (careful hand washing, using soap and warm water) must be followed by providers and the children.
- Proper cleaning of soiled articles including laundering with hot, soapy water and sanitizing objects and surfaces.

**Treatment:** Topical antibiotics are required for the management of bacterial infections.

**Comments:** The child with watery eye discharge without redness of the eyelid, eye pain or fever does not require exclusion. Careful hand washing and precautions for drainage and secretions is required for this type of eye discharge. Eye inflammation may also be caused by chemical or allergies that cannot be spread to other people.



# Croup

**Description:** Croup is a very common respiratory problem. It is a swelling of the airway at the voice box (larynx) and windpipe (trachea) usually caused by a virus. The same virus that commonly causes croup can cause other respiratory diseases such as bronchitis, bronchiolitis and pneumonia. The disease is characterized by a harsh barking cough that can be scary for children and caregivers. Croup is most common in children under 3 years of age. It occurs most often between October and March.

**Symptoms:** An acute respiratory infection involving the epiglottis, voice box, windpipe and bronchi. This infection may cause respiratory distress ranging from mild to severe. The cough has a “barking” or “brassy” harsh quality. A high-pitched sound may be heard on inhalation.

**How it is Spread:** Direct contact with an infected person, airborne or indirectly by objects soiled by respiratory secretions. Children with croup should not have frequent contact with infants under 6 months old.

**Incubation:** The incubation period is two to nine days, depending on the agent that causes the infection.

**How Long Can a Person Pass the Infection to Others?** The infection can be passed to others the duration of the disease.

## **Responsibility of Parents and Caregivers:**

- Medical treatment should be obtained. Major complications may occur.
- Teach children to cough and sneeze into their elbow, wipe noses using disposable tissues, throw the tissue into the wastebasket and wash their hands.
- Follow control measures below.

## **Control Measures:**

- Use good hand washing technique at all the times as required by the Ohio Child Care Rules. This is especially important after wiping or blowing noses or contact with any nose, throat or eye secretions.
- Clean and sanitize all mouthed toys and frequently used surfaces as outlined in the Ohio Child Care Rules.
- Exclude until severe symptoms are gone.

**Treatment:** Depends on the agent causing the infection and the severity of the illness.



# Cytomegalovirus

**Description:** Cytomegalovirus (CMV) is a common virus that usually causes no disease. Most people (50-80 percent) have caught CMV by adulthood without even being aware of it. Once a person has been infected, the virus remains in the body, usually in an inactive state, for life. If a person is stressed, develops cancer or becomes pregnant, the infection may become active for a while. Most women have the virus before they become pregnant. If the virus becomes active, the unborn child may also get infected but usually has no side effects. If a woman gets CMV for the first time while she is pregnant, the risk of disease in the baby is greater. About two to five babies per 100 born to mothers who first got infected during pregnancy will have symptoms of CMV infection at birth.

**Symptoms:** There usually are no symptoms. Occasionally fever, swollen glands or fatigue may occur.

**How is it Spread:** The virus is spread person to person by close contact with body fluids that contain CMV, such as urine, saliva, blood, cervical secretions and semen. Most people get the virus as children in one of three ways:

- 1.) During birth from cervical secretions.
- 2.) Through breast milk.
- 3.) From person-to-person contact with saliva or urine. In most cases the infection causes no symptoms.

**Incubation Period:** Usually 2-12 weeks

**How Long Can a Person Spread the Infection to Others?** The infection can be spread as long as the virus is shed in body secretions, which can be months or years.

**Responsibilities of Parents and Caregivers:** Because CMV is a common virus among children and adults, it is not necessary for parents to inform the child care provider that their child has it. CMV is not a reportable disease.

**Control of Spread:** Shedding of CMV in saliva and urine is common in children under age 5. In some studies, as many as 50 percent of healthy infants and toddlers in child care facilities may be shedding the virus at any one time. Therefore, it is not necessary to exclude these children from child care. Women of childbearing age working with young children should always practice good personal hygiene. This means good hand washing after contact with body secretions and especially after changing diapers or assisting in toilet care.

**Treatment:** None



## Diabetes in the Child Care Setting

Diabetes is a chronic condition in which the pancreas does not produce enough insulin or there is underuse of insulin. Insulin is needed for the body to store and use sugar (glucose). When insulin is not produced or used in the proper amount, diabetes occurs. Most children have type 1 (also called insulin dependent diabetes); most adults have type 2 (also called non insulin dependent diabetes).

The exact cause of diabetes is unknown. Some signs and symptoms of type 1 diabetes are: increased urination, hunger and thirst; sudden weight loss; irritability; feeling tired; and elevated blood sugar. The major goal in the treatment of diabetes is good control of the child's blood sugar and prevention of long-term complications. Control of the blood sugar is achieved by the child receiving insulin (via injections, insulin pump or pen) following a special daily diet, exercise and monitoring blood sugar.

Insulin and exercise lower blood sugar. Food raises blood sugar. An insulin reaction occurs when blood sugar is too low, either due to too much exercise or too little food. Insulin reaction occurs suddenly.

### **Warning signs and symptoms of a child having an insulin reaction are:**

- Excessive perspiration, inattentiveness, nausea
- Headache, confusion, drowsiness
- Irritability or crying, inability to concentrate, trembling
- Blurring of vision, abdominal pain, lack of coordination

If the reaction is not treated, a child could become unconscious or have a seizure.

It is important to have an approved plan by the child's parent and health care provider on how the insulin reaction should be handled. Usually the child is given some form of sugar (this will rapidly increase the amount in the blood). Sugar can be provided by giving the child two spoonfuls of sugar, fruit juice or regular pop. The child should improve within 10 minutes. Provide the child with additional food and have him resume activities. (The specific actions for an insulin reaction should be spelled out in the child's Medical/Physical Care Plan.) If he does not improve, call the parents and health care professional. Call 911 if the child becomes unresponsive.

### **Additional tips in caring for the diabetic child:**

- Staff should know the signs of an insulin reaction and how to handle any emergency the child may have.
- Prepare meals according to the child's special needs.
- Give meals and snacks on time.
- Ask parent or health care provider about giving extra food prior to strenuous exercise activity.
- Assist in the monitoring the child's blood-sugar level if requested.

Remember, children with diabetes are normal children, they do not want to be singled out as "different." With few exceptions and some precautions taken to avoid insulin reactions, they can and should participate in all class activities. For more information, contact the American Diabetes Association Information Service Center, 1-800-ADA-DISC, Ohio Diabetes Prevention and Control Program, 614-466-2144 or the Ohio Affiliate of the American Diabetes Association, 1-800-DIABETES (1-800-342-2383).



# Diarrheal Diseases

**Description:** Diarrhea can be caused by a variety of different germs including bacteria, viruses and parasites. However, children can sometimes have diarrhea without having an infection such as when diarrhea is caused by food allergies or as a result of taking medicines such as antibiotics. A person should be considered to have diarrhea when the person has three or more loose stools in a 24-hour period.

**Symptoms:** Persons with diarrhea may have additional symptoms including nausea, vomiting, stomachaches, headache or fever.

**How it is Spread:** Diarrhea is spread from person to person when a person touches the stool of an infected person or an object contaminated with the stool of an infected person and then ingests the germs, usually by touching the mouth with a contaminated hand. Diarrhea can also be spread by contaminated food and water. Children in diapers and child care providers who change their diapers have an increased risk of diarrheal diseases.

**Incubation:** Varies on the causative agent of the diarrhea.

The most common diarrheal diseases in the child care setting are discussed individually below. If the cause of diarrhea is known, **refer to the Staff and Child Re-admittance Criteria section** for the re-admittance information for the diseases described.

**Shigella** - This bacterial infection is spread by the fecal-oral route and may be spread through groups of children who are toilet trained, as well as through groups of children who are in diapers. Signs of *Shigella* infection include severe bloody diarrhea, fever, cramping, nausea and vomiting. It may be spread to parents and siblings and whole families may be ill in a matter of days. The illness may even cause death.

**Clostridium difficile (C.difficile)**- This infectious disease may be spread to others; however, only people in health care settings or on antibiotics are likely to become ill. To prevent the spread, good handwashing technique must be followed. Please note: Alcohol rubs should be avoided because they are not effective against spore-forming bacteria. Exclude from childcare or school until 24 hours after diarrhea has cleared. Refer to the ODH Web site for additional infection control guidelines: <http://www.odh.ohio.gov/healthresources/infectiousdiseasemanual.aspx>.

**Campylobacter** - Persons often become infected with this bacterium when they eat or drink foods or liquids contaminated with feces of infected animals (birds and mammals). Exposure to human feces in such a manner, especially from diapered children, may promote transmission in child care settings. Many people become infected from eating poorly cooked meats, especially poultry. Water-borne infections result from drinking water from contaminated wells, springs or streams. Outbreaks have been reported in child care facilities but they are rare and sporadic.

**Giardia** - This protozoan illness is spread from person to person when a person touches the stool of an infected person (or an object which has been contaminated by the stool of an infected person) and then ingests the germs. Infection is spread by lack of proper hand washing after bowel movements, after changing diapers or before preparing foods. It may also be transmitted through contaminated water such as in water play tables. Outbreaks have also been linked to portable wading pools and contaminated water supplies. Many children infected with *Giardia* have no symptoms. Other children may have foul-smelling, greasy diarrhea, gas, stomachaches, fatigue and weight loss. It can be easily spread in the child's home and parents and siblings may become infected.



**Cryptosporidiosis** -This protozoan illness is spread through fecal-oral transmission by feces of an infected person or an object that has been contaminated with the infected person's feces. Infection can also occur if someone ingests food or water contaminated with the parasite. Outbreaks in the child care setting are most common in late summer/early fall (August/September), but may occur at any time. Spread is highest among children who are not toilet trained and higher in toddlers than in infants. The greatest risk is for those who change diapers. Symptoms include watery diarrhea and stomachache, but may include nausea and vomiting, general ill feeling and fever. Symptoms can come and go for up to 30 days, but may subside in less time. Sanitation during an outbreak should be with hydrogen peroxide in the child care setting. (A bleach solution is not effective against this parasite.) Please refer to the CDC link for a handout about cleaning and sanitation procedures during a Crypto outbreak in child care settings: <http://www.cdc.gov/crypto/daycare/outbreak.html>

**Salmonella** - Persons with this infection experience fever, stomach cramps, nausea and vomiting in addition to diarrhea. Symptoms may last for two weeks or more, but are usually gone within a week. The bacterium is present in feces of ill and recently recovered persons and infections may spread from person to person. Some foods such as chicken and eggs come from naturally infected sources, while others such as tomatoes and some vegetables, become contaminated during processing. It is important to practice good hygiene and hand washing when preparing food. Also, pets such as turtles, lizards and birds, often carry *Salmonella* in their digestive tracts.

**Yersinosis** -This bacterial infection is spread by the fecal-oral route; by eating or drinking contaminated food and water; and by contact with infected people or animals. *Yersinia* infection may cause mild or severe diarrhea, fever, vomiting, headache and abdominal cramps. Diarrhea may last from a few days to one or two weeks; chronic diarrhea, lasting several months, may develop. The infection may sometimes mimic appendicitis. It is relatively uncommon and usually occurs as a single, isolated event. *Yersinia* has been found in raw milk, mussels, oysters, scallops, raw chitterlings (pig intestines), tofu and canned beef.

**Prevention tips:** Avoid drinking unpasteurized milk and improperly treated water, practice good hand washing after handling animals, especially domestic pets.

**E. coli** - Persons infected with this bacteria may have very mild illness while others develop severe bloody diarrhea. Infections with this organism are often the result of eating undercooked meat (ex. hamburger). Feces may also spread this infection and children and staff may pick it up from ill persons in child care facilities.

### **Responsibilities of Parent and Caregivers/Control**

To prevent diarrheal diseases from spreading in the child care setting:

- Exclude staff or children with diarrhea of unknown cause from the child care setting until diarrhea-free for 24 hours or unless a physician has stated the diarrhea is noninfectious and it can be contained in a diaper, potty chair or toilet. If the cause of diarrhea is known, refer to the Staff and Child Re-admittance Criteria section.
- Make sure everyone in the child care setting practices good hand washing techniques.
- Wash your hands after using the toilet, helping a child use the toilet or diapering a child and before preparing, serving or eating food.

Have children wash their hands upon arrival at your child care facility, after using the toilet, after having their diapers changed (an adult should wash an infant's or small child's hands) and before eating snacks or meals.

- Sanitize toys, bathrooms and food preparation surfaces daily. (See Schedule for Sanitizing and Cleaning Chart)
- Use disposable paper towels for hand washing.

- Notify parents of children who have been in direct contact with a child who has diarrhea. Parents should contact the child's physician if their child develops diarrhea.
- Use disposable table liners on diaper changing tables and sanitize tables after each use.
- Bleach solution should be used to disinfect/sanitize surfaces contaminated with vomitus or diarrhea.
- If at all possible, the person who prepares and/or serves food should not change diapers.
- In larger programs, diapered children should be cared for by different caregivers in a room separate from toilet-trained children.
- Use diapers with waterproof outer covers that contain liquid stool or urine or use plastic pants.
- Make sure children always wear clothes over diapers.
- Do not allow diapered children to use wading or swimming pools unless they are wearing leak-proof swim diapers.
- Notify your local health department if the number of cases is excessive, even if undiagnosed. There are laws/regulations dealing with persons with diarrheal diseases who attend/work at child care programss.
- \* Notify the local health department if two or more people in one classroom or home have diarrhea within a 48-hour period. Also notify the local health department if you learn or suspect that a child in your care has diarrhea due to *Shigella*, *Campylobacter*, *Salmonella*, *Giardia*, *Cryptosporidium*, *E. coli* O157: H7 or *Yersinia*. Any child with prolonged or severe diarrhea or diarrhea with fever, or a known exposure to someone with infectious diarrhea, should be seen by a health care provider. (See the ODH Communicable Disease Chart)

**Treatment:** Depends on the causative agent. (See the ODH Communicable Disease Chart.)



# Diphtheria

**Description:** Diphtheria is a disease caused by the bacterium *Corynebacterium diphtheriae*, which invades the throat, tonsils, nose or skin. It is the toxin (*poison*) produced by the bacteria that causes severe disease problems.

**Symptoms:** Fever, sore throat and tiredness. The infection in the throat may cause a membrane to develop on the tonsils that could make breathing difficult. The individual could develop severe complications such as inflammation of the heart or inflammation of the nerves.

**How it is Spread:** Diphtheria is spread to others through close contact with the discharges from an infected person's nose, throat, eyes and skin lesions. Rarely, transmission may occur after contact with articles soiled by the discharges from the nose, throat or skin lesions.

**Incubation:** Symptoms usually appear in two to five days after infection, with a range of one to 10 days.

**How Long Can a Person Spread the Infection to Others?** A person may be contagious for two weeks, but seldom more than four weeks. If the individual is treated with appropriate antibiotics, this can quickly stop the spread of the bacteria.

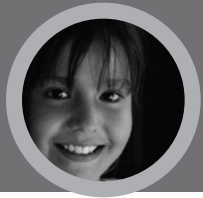
## Responsibility of Parents and Caregivers:

- Review immunization records of all children upon admission and periodically thereafter. Any child whose immunizations are incomplete or not up to date should be referred to the local health department or the child's physician for proper immunization.
- Upon notification by a parent or health care worker that a child absent from the child care setting has contracted diphtheria, immediately contact the local health department for instructions on preventive measures to be taken.
- Diphtheria is a reportable disease in Ohio. The local health department may advise caregivers to closely observe all children and adults in the child care setting for sore throats for five days (the incubation period), request that anyone developing a sore throat see a physician, to obtain nose and throat cultures or skin cultures if skin lesions present, prescribe antibiotics for close contacts and carefully observe group separation and good hygiene procedures.
- Staff and children may return after two cultures from both throat and nose (and skin lesions in cutaneous diphtheria) taken not less than 24 hours apart, and not less than 24 hours after cessation of antimicrobial therapy, fail to show Diphtheria bacilli. If culturing is unavailable or impractical, exclusion may be ended after 14 days of appropriate antimicrobial therapy.

**Control Measures:** The most effective control measure is maintaining the highest possible level of immunization in the community. Other methods include prompt treatment of cases and monitoring.

**Treatment:** Certain antibiotics can be prescribed for the treatment of diphtheria. A diphtheria antitoxin is also used for treatment.

**Comment:** Up-to-date vaccination with the DTaP (diphtheria is the "D") vaccine can prevent this very serious, life-threatening disease.



## Earache (Otitis Media)

**Description:** An earache or ear infection (otitis media) is usually a complication of an upper respiratory infection such as a cold. Otitis media usually occurs in children under 3 years of age. Otitis media is common in young children whether they attend child care or are cared for at home. However, some children appear to be more susceptible to otitis media than other children.

**Symptoms:** include inflammation of the middle ear, often with fluid building up behind the ear drum. The child may cry persistently, tug at the ear, have a fever, be irritable and be unable to hear well. These symptoms may sometimes be accompanied by diarrhea, nausea and vomiting.

**How it is Spread:** Otitis media is not contagious, but the upper respiratory illnesses that can lead to otitis media are infectious. Upper respiratory infections are spread when one person comes in contact with the respiratory secretions of an infected person that have contaminated the air or an object.

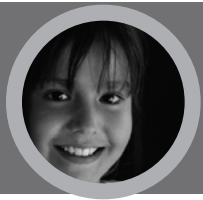
A child with an earache does not need to be excluded from the child care setting unless the child is too ill to participate in normal activities or needs more care than the provider can give without compromising the care given to the other children.

**Responsibility of Parents and Caregivers:** To help prevent the upper respiratory infections, that may lead to otitis media, teach children to cover their mouths with a disposable tissue when they cough and blow their noses with disposable tissues.

- Use a tissue only once and then immediately throw it away.
- Do not allow children to share toys they put in their mouths.
- After a child has discarded a toy that can be put in the mouth, pick it up and put it in a bin for dirty toys that is out of reach of the children. Wash and sanitize these toys before allowing children to play with them again. (See section on Cleaning and Sanitation Materials).
- Do not let infants fall asleep with a bottle in their mouth.
- Make sure all children and adults use good hand washing practices. (See section on Hand Washing in the Environmental Control Measures section).

**Control Measures:** See above section.

**Treatment:** Otitis media is often treated with antibiotics. Some doctors give children daily antibiotics to prevent otitis media in children who have had repeat cases. Some children with chronic infections may require an operation to insert a tube to drain the fluid from the ear.



# Fifth Disease

**Description:** Fifth disease is a mild childhood illness that mainly occurs in children 4-10 years of age. It is caused by a virus. Fifth disease occurs year-round, but outbreaks are more common in the late winter and early spring.

**Symptoms:** May include fever, mild flu-like symptoms and a rash. The rash begins on the face and gives a “slapped-cheek” appearance. The rash usually spreads to the trunk and extremities and may cause itching. The rash disappears within one week, but may reappear during periods of exercise, exposure to sunlight or emotional upset. The rash may come and go for several weeks.

**How it is Spread:** By direct or indirect contact with respiratory secretions and droplets.

**Incubation:** Usually four-14 days, may be as long as 20 days.

**How Long Can a Person Pass the Infection To Others?** A person with fifth disease is most contagious before the symptoms occur (about five days prior to symptoms). A person may spread the infection for two days after the rash appears. It is not necessary to exclude a child with fifth disease from child care or school unless the child has a fever or is uncomfortable.

**Responsibilities of Parents and Caregivers:** Caregivers should inform parents of children who are exposed.

**Control of Spread:**

- Wash hands after contact with soiled tissues and articles, and after contact with nose and throat discharges.
- Dispose of tissues soiled with nose and throat discharges.
- Use proper cleaning and sanitation guidelines (See Cleaning and Sanitation).

**Treatment:** No specific treatment. The disease usually goes away on its own.

**Comments:** People with an immune deficiency, sickle cell disease or other blood disorders may be at risk for complications of infection. The risk for pregnant women is very low; however, pregnant women should consult their physician if exposed to an ill child.



# Hand-Foot-and-Mouth Disease

Hand-Foot-and-Mouth Disease (Coxsackie virus)

**Description:** This is a mild disease caused by the coxsackie virus that occurs most frequently in young children. Infections are most common in summer and fall.

**Symptoms:** Symptoms may include fever, sore throat, a sore mouth (may look like “cankersores”) and painful blisters that occurs on the hands, feet and sometimes the buttocks. The blisters usually disappear in a week.

**How it is Spread:** The disease may be spread by respiratory secretions either by direct contact with secretions or indirectly by touching items soiled with discharge from the infected person.

**Incubation:** Usually three to five days.

**How Long Can a Person Pass the Infection to Others?** A person may be infectious for several weeks after the infection occurs, but is most infectious for seven days after developing symptoms.

**Responsibility of Parents and Caregivers:**

It is not necessary to exclude a child unless he/she has blisters in the mouth and drools or has weeping lesions on hands or doesn’t feel well enough to participate in daily activities.

**Control Measures:**

- Wash hands and use sanitation procedures.
- Encourage good personal hygiene and fluid intake.

**Treatment:** No specific treatment. The disease usually goes away on its own.

**Comments:** The coxsackie virus is rapidly killed by heat, ultraviolet light and bleach.



# Head Lice

**Description:** The head louse is a blood-sucking insect that lives on the scalp.

**Symptoms:** Lice usually cause frequent itching. Back of the head and behind the ears are the places most favored by lice.

**How it is Spread:** Most often, it is spread by direct hair-to-hair contact with an infested person. Less frequently, spreading may occur by contact with hats, combs, brushes or upholstered furniture recently used by an infested person. Lice do not jump or fly.

**Incubation Period:** The eggs (nits) usually hatch in seven days. The resulting lice are then capable of laying eggs in 10 days.

**How Long Can a Person Pass the Infection to Others?** The infection can be spread as long as the lice are alive. Lice do not survive off the human body more than two days.

## Responsibility of Parents and Caregivers:

A child who is observed scratching his/her head should be examined for eggs (nits) or lice near the scalp. Nits are yellowish brown to white, about the size of a typewritten comma and are firmly attached to the hair shaft. Eggs that are more than 1/4-1/2 inch out from the base of the scalp probably are dead or are only empty egg casings. If live eggs are present, so are lice and proper treatment of the child is necessary. Lice are less than 1/8 inch long, clear or tan in color and move quickly.

## Control of Spread:

- Exclude a suspected/confirmed case until treatment has begun.
- Remove all nits after the first treatment. This is a good idea even though the child is not contagious at this point.
- Carefully examine the heads of all children, yourself and family.
- Examine heads of close contacts of a case again in two weeks.
- Educate the children on head lice and why personal items (such as combs) should not be shared.
- Wash clothing and bedding in the machine using hot water and dry using the hot cycle or press with a hot iron. Non-washable items can be dry cleaned or sealed in a plastic bag for 14 days. This should be done with items both at the place of child care and at the home.
- Carpet and furniture should be vacuumed. Insecticide sprays should not be used because they are not effective and have harmful fumes.
- Combs and brushes should be soaked in a sanitizing solution (1/4 cup of bleach to a gallon of water) or lice-killing shampoo used for treatment or soap and hot water (130° F) for one hour.
- Call the local health department for outbreaks, unusual incidence or an epidemic.
- Encourage parents to inspect children's heads regularly.

**Treatment:** Prescription medication (Kwell, NIX) and non-prescription medications (RID, A-200, R&C) are used for treatment. Follow directions on the medications. Treatments can be toxic if not used correctly. Regardless of the product used, an effort should be made to physically remove all nits. A physician should be consulted before treating a child less than age 2. Family members may also need treatment.

**Comments:** Head lice are not associated with poverty, age or sex. A person does not have to be dirty or poor to get lice. The closeness of children in child care in the home increases the potential for spread.



# Hepatitis A

**Description:** Hepatitis A is an infection of the liver caused by a virus. It is diagnosed by doing a blood test.

**Symptoms:** Early symptoms include abdominal discomfort, loss of appetite, nausea, low-grade fever and tiredness. Later in the illness, a person may experience yellowing of the skin and whites of the eyes, dark urine and pale-colored stools. Children under 3 rarely have symptoms but are frequently involved in spreading the infection. Older children and adults are much more likely to have symptoms that may be mild, lasting one to two weeks, or severe lasting up to several months.

**How it is Spread:** Hepatitis A virus is found in stool. Unwashed hands contaminated with stool from an infected person carry the virus to another person's mouth. It may be spread indirectly from one person to another by objects or food touched by unwashed contaminated hands.

**Incubation:** Two to six weeks, commonly 28-30 days.

**How Long Can a Person Spread the Infection To Others?** A person is most infectious in the two weeks before yellowing (jaundice) occurs and slightly infectious for the first week of jaundice.

**Responsibility of Parents and Caregivers:**

- Notify the local health department if any child or adult in your program develops **Hepatitis A. (See ODH Communicable Disease Chart).**
- Inform parents of illness and symptoms to watch for in the child.
- Ask parents to notify caregiver if their child gets this illness.
- Do not accept new children for child care until four weeks after the last case.

**Control of Spread:**

- Exclude the ill staff or child until 10 days after initial onset of symptoms.
- Immune globulin (IG) or vaccine are not usually recommended after exposure in the school setting but may be in the child care classrooms. Contact your local health department for guidance.
- Be sure good hand washing and cleaning procedures are being followed in the child care home and in the child's home.

**Treatment:** Once symptoms develop, there is no treatment for hepatitis A. The illness will stop as the body fights off the virus. Children usually do not have symptoms when ill, but can still spread the infection. The first sign of an hepatitis A outbreak in a child care setting is likely to be an ill parent or caregiver, not an ill child. IG (a shot) may prevent symptoms from occurring when given to contacts soon after exposure. As mentioned above, IG and vaccine are not usually used in the school setting but may be used in the child care classroom. Contact your local health department for guidance.

**Vaccine:** A vaccine is available to prevent hepatitis A, but it is not currently licensed for children less than 1 year of age.





# Hepatitis B

**Description:** Hepatitis B is an infection of the liver caused by the hepatitis B virus. The virus is found primarily in the blood of an infected person and occasionally in some other body fluids. It is more common in adults than in children.

**Symptoms:** If present, symptoms may include vague abdominal discomfort, loss of appetite, nausea, vomiting, fever, tiredness, joint pain, dark urine, light stools and yellow skin or eyes (jaundice).

**How it is Spread:** Transmission occurs in a child care setting primarily when infected blood or saliva enters through a cut or scraped area on the skin, or mucous membranes (like the lining of the mouth).

**Incubation Period:** Six weeks to six months.

**How Long Can a Person Pass the Infection?** For an acute infection, six months regardless of whether symptoms are present. For the carrier state, it can be contagious for longer than six months, possibly for life.

**Responsibilities of Parents and Caregivers:**

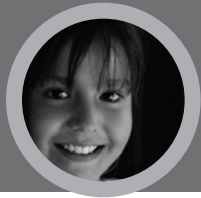
- Notify the local health department (See ODH Communicable Disease Chart).  
It is not necessary to exclude children with hepatitis B from child care settings.

**Control of Spread:**

- Wear disposable vinyl or latex gloves when handling blood or blood-contaminated bodily fluids.  
Wash hands after removing gloves. Child care staff must use standard precautions.
- Use proper hand washing and sanitizing techniques.
- Make sure all children use good hand washing practices.
- Try to prevent scratching, biting or fighting.
- Do not allow anyone else to use the child's toothbrush and nail clippers.

**Treatment:** There is no treatment available. Prevention of hepatitis B is possible through a series of three injections of vaccine.

**Hepatitis B Vaccine:** The American Academy of Pediatrics recommends all infants receive the vaccine during the first 18 months of life. Child care staff who work with blood or blood-contaminated body fluids or developmentally delayed or aggressive children should be immunized with three injections, the same as the children.



# Impetigo

**Description:** Impetigo is a bacterial skin infection caused by the staph (*Staphylococcus aureus*) or strep (group A *Streptococcus*) organism (or both).

**Note:** For information about a specific type of staphylococcus infection called Methicillin-resistant *staphylococcus aureus* (MRSA), please see the MRSA fact sheet.

**Symptoms:** Flat, yellow, crusty or moist patch on skin. Lesions are usually on exposed skin areas and around the mouth and nose.

**How it is Spread:** This infection can easily spread to other parts of the infected person's body or to other people by direct contact with sores or contaminated clothes. Dry, cracked skin serves as an area for growth of the strep and staph bacteria.

**Incubation:** Two to 10 days.

**How Long Can a Person Pass the Infection To Others?** The infection can be spread as long as the sores are draining.

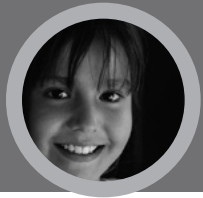
**Responsibility of Parents and Caregivers:**

- Notify parents if child has been exposed.
- Child should be seen by a physician.

**Control of Spread:**

- Allow the child to return only after treatment with antibiotics for at least 24 hours, and all lesions (sores) are dry.
- Infected area should be cleaned with mild soap and running water.
- Wear gloves while applying antibiotic ointment as prescribed by the physician and wash your hands afterward. (An oral antibiotic may be prescribed.)
- Wash the infected child's clothes, linen and towels at least once a day and never share them with other children.
- Emphasize good hand washing procedures for both the caregiver and children.
- Make sure policies on cleaning and sanitizing toys are followed.

**Treatment:** Follow physician recommendations which may include antibiotic ointment or antibiotic by mouth or injection. Refer the child back to his physician if the condition does not improve.



# Infectious Mononucleosis

**Description:** Infectious mononucleosis is a viral illness that affects certain blood cells. It is caused by the Epstein-Barr virus (EBV). EBV is believed to be present in saliva.

**Symptoms:** Most young children infected with EBV show no symptoms, unlike older children and adults, who may have fever, fatigue, headache, swollen glands, red rash on roof of mouth, occasional abdominal pain and inflamed throat and tonsils.

**How it is Spread:** Infectious mononucleosis is spread from person to person through contact with the saliva (on hands, cups or kissing) of an infected person. The virus spreads more rapidly among children in closed or overcrowded conditions. Most adults have been exposed to EBV by the age of 18 years and are immune.

**Incubation:** Symptoms appear four to six weeks after exposure.

**How long Can a Person Spread the Disease to Others?** The virus is shed in the throat during the illness and for up to a year after infection.

**Responsibilities of Parents and Caregivers:** If a person in your facility develops infectious mononucleosis:

- The infected person may return to the child care setting when he or she is able to participate in usual activities.
- Make sure children and adults do not share eating or drinking utensils.
- Make sure children and adults follow good hand washing practices.

**Control:** Avoid activities involving the transfer of body fluids with someone who is currently or recently infected with the virus.

**Treatment:** No treatment other than rest is needed in the vast majority of cases.



# Influenza

**Description:** Influenza (sometimes called “the flu”) is a viral infection of the nose, throat, bronchial tubes and lungs. There are two main types of influenza virus: A and B. Type A virus tends to cause more severe illness than type B. Each type includes many different strains which tend to change each year. Most people who get influenza will recover in one to two weeks, but some people will develop life-threatening complications as a result of the flu.

**Symptoms:** Influenza symptoms include sudden onset of fever, chills, headache, sore muscles and respiratory symptoms (such as cough, sore throat or runny nose).

**How it is Spread:** The influenza virus is usually passed when an infected person coughs or sneezes or speaks and another person inhales droplets containing the virus. It can be passed indirectly by contact with items freshly soiled by nose and throat discharge from an infected person.

**Incubation:** One to four days.

**How Long Can a Person Spread the Disease to Others?** Most adults may be able to infect others beginning one day before symptoms develop and up to five days after the onset of illness. Children may be infectious for 10 days or more after onset of symptoms.

**Responsibility for Parents and Caregivers:** If a child or staff person develops a fever of 100°F or higher under the arm (or 101° orally for an adult) AND chills, cough, sore throat, headache or muscle aches, he or she should be sent home. Child care facilities should report of any case of influenza to the local health department.

During an epidemic of influenza, you should:

- Decide whether to exclude based on symptoms that are present (i.e., fever, vomiting)
- Closely observe all children for symptoms and encourage parents to refer anyone developing symptoms to his or her physician.
- Make sure all children and adults follow good hand washing and hygiene practices including use and proper disposal of paper tissues.
- In large facilities, follow appropriate group separation practices.
- Closely observe all children for symptoms and refer anyone developing symptoms to his or her physician.
- Notify parents.

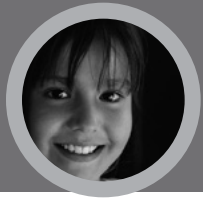
**Control:** Anyone who wants to reduce their chance of catching influenza may receive the vaccination. Because the influenza virus changes frequently, yearly vaccination in beginning in October is recommended for protection from influenza. Influenza vaccination is recommended for all adults in the child care setting, especially those who are in any of the following high-risk categories:

- Fifty years of age and over.
- Have chronic lung or heart disease including asthma.
- Require regular medical care for chronic metabolic (including diabetes mellitus), kidney, heart or blood disorders or suppressed immune system disease.
- People with any condition that can compromise respiratory function.
- Live or work with people who are in any of the above categories (or with children on long-term aspirin therapy).
- Women who will be pregnant during the influenza season.

Any child 6 months and older can be vaccinated against influenza, and vaccination is now recommended for all healthy children six months through 18 years of age. In addition, children in the following groups are at high risk of serious complications from influenza:

- All children six months through four years of age.
- Have chronic lung (including asthma) or heart disease.
- Require regular medical care for chronic metabolic (including diabetes mellitus), kidney, blood or suppressed immune system diseases.
- Are on long-term aspirin therapy.

**Treatment:** Persons with influenza should rest, drink plenty of liquids, take medications to relieve the symptoms of the flu. Antiviral drugs, prescribed by a doctor, can be used to prevent and treat influenza.



# Lead Poisoning

Lead poisoning is the No. 1 environmental health threat among children. Even low blood lead levels can be harmful to children and have been associated with decreased intelligence as a long-term complication. Most children with elevated lead levels do not demonstrate easily recognizable symptoms. The only way to tell they have lead poisoning is to test their blood.

Young children, especially those 12 to 24 months old, are at greatest risk for lead poisoning because they often put their hands in their mouths and thus are more likely to eat dust, paint chips and soil contaminated with lead. Children also absorb lead more easily due to their rate of growth, development and increased metabolism (the process the body uses to change nutrients to energy). At this critical stage of brain development, lead causes more damage. Therefore, children are more sensitive to the harmful health effects of lead.

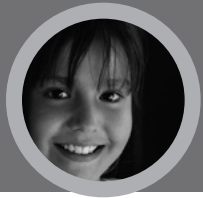
## Children can be Exposed to Lead by:

- The ingestion and/or inhalation of household dust containing lead from deteriorating or chipping lead-based paint. This is the most common pathway of lead exposure for children. Seventy-four percent of all homes built before 1978 in the United States have some lead-based paint on the exterior and/or interior of the home.
- Drinking water that has moved through lead pipes or pipes with lead solder.
- Being exposed to lead dust carried into the home by family workers who work with lead.
- Eating food served on lead-glazed pottery, improperly fired ceramic ware or leaded crystal.
- Eating food taken from lead-soldered cans.
- Taking some traditional/folk medicines that contain lead such as greta or azarcon.
- Being exposed to lead through contamination of the environment by adult hobbies such as making stained glass or pottery.

As a child care provider, you can help reduce children's risk of lead poisoning by:

- Washing children's hands frequently and always before meals.
- Feeding children diets rich in iron and calcium, which will reduce the amount of lead absorbed from the gastrointestinal tract.
- Preparing and storing food in containers that do not release lead such as those made of lead-free glass, stainless steel or plastic. Never store food in opened cans. Use only ceramic containers that have labels saying they are made with lead-free glazes. Use only toys and arts and crafts materials that do not contain lead. Arts and crafts materials made after 1990 in the U.S. that are labeled "conforms to ASTM D-4236" and have no health warnings are considered nontoxic.
- Relocating during remodeling projects that may create lead-based paint dust.
- Having your facility evaluated for lead hazards if it was constructed prior to 1960.

Older buildings with deteriorating paint carry a greater risk for lead hazards. Also be cautious of buildings that have been a source of lead exposure for children who have been diagnosed with lead poisoning. Lead paint concentrations were highest before 1950, but lead continued to be used in residential paint until 1978. To get further information about childhood screening test, home and residential environmental investigation and preventing lead poisoning, call the Ohio Department of Health at 1-877-NOT-LEAD or your local health department, the National Lead Information Hotline **800-LEAD-FYI** or the National Lead Information Clearinghouse at **800-424-LEAD**.



# Lyme Disease

**Description:** Lyme disease is an infection caused by bacteria. It is diagnosed by signs and symptoms and a blood test.

**Symptoms:** A typical early symptom is a slowly expanding red rash. (However, not everyone gets a rash.) The rash often starts as a flat or raised red area that slowly gets bigger after several days, sometimes reaching several inches across. The center may become clear, remain even or develop blistering or scabbing. The rash fades after several weeks if not treated. Other symptoms include fatigue, headache, pain or stiffness in muscles or joints and swollen glands. Weeks or months after disease onset, the person may develop arthritis, heart symptoms or nervous system symptoms.

**How it is Spread:** Lyme disease is not spread from person to person. It can be spread only by the bite of a specific tick. This type of tick lives in wooded areas and areas with high grass. Animals such as dogs and cats can carry the ticks home. The ticks that spread Lyme disease are not commonly found in Ohio.

**Incubation Period:** Three to 32 days after a tick bite.

**How Long Can a Person Spread the Infection To Others?** Lyme disease cannot be spread from one person to another.

## Responsibilities of Parents and Caregivers:

- Report Lyme disease to the local health department. They will probably already know about it because blood tests are performed there.
- If a child is bitten by a tick or a tick is found on the child's body, be sure to tell the parents. If the child becomes ill, the parents can tell the doctor so LHD can be considered.

**Control/Prevention:** Even though Lyme disease is not common in Ohio, take the following precautions just in case:

- Keep yard and play areas mowed.
- Do not allow children to play in tall grass.
- Closely check the children's bodies (and your own) for ticks after field trips through woods or tall grass. It is important to quickly remove a tick from the body (within 36 hours).
- If you find a tick, use tweezers to grasp the tick as close to the skin as possible. Slowly pull the tick straight out. Do not yank, as this may result in leaving the mouthpiece in the skin. Do not use hot matches, cigarettes, alcohol or nail polish remover. Put the tick in a small container of alcohol and throw in the trash can. Wash your hands and the bite site well.

**Treatment:** Only a doctor can diagnose Lyme disease. It is easily treated with antibiotics, especially when found early.



## Measles (Rubeola 10-day measles)

**Description:** Measles is a highly contagious and serious viral illness that may cause serious complications such as pneumonia and inflammation of the brain.

**Symptoms:** Early symptoms include fever (103-104 F), tiredness, cough, runny nose and inflamed eyes and severe intolerance to light for two to four days. The cough tends to be worse at night. The fever lasts two to four days. Then a red-brown blotchy rash appears on the face which extends to the trunk and finally to the extremities. The rash is usually gone after six days. Measles usually last about 10 days. The cough may be the last symptom to disappear. A child with measles feels quite ill.

**How it is Spread:** It is spread by direct contact with nasal or throat secretions of infected persons and by air-borne spread (being in the same room with someone who has measles.)

**Incubation Period:** Twelve to 17 days, usually 14 days until the rash appears.

**How Long Can a Person Pass the Infection To Others?** It can be spread to others four days before the onset of symptoms until four days after the appearance of the rash.

### Responsibilities of Parents and Caregivers:

- Notify the local health department of suspected measles. Measles is rare so consult with the local health department immediately if seen. (See ODH Communicable Disease Chart)
- One case of measles is considered an outbreak.
- Do not accept new children for care until two weeks after the last case of measles.
- Ask parents to notify caregiver of their child's illness.

### Control of Spread:

- Exclude the child from child care for four days following the onset of the rash.
- Un-immunized children and staff who have been exposed to measles may receive vaccine.
- Exclude children who do not receive the vaccine until the outbreak is under control (minimum of two weeks from the last case).
- Observe all children closely for any symptoms.
- Caregivers should consult their physician to determine whether they need to be immunized.

**Treatment:** There is no treatment available.

**Comments:** Measles is prevented through immunization with the measles – mumps – rubella (MMR) vaccine. Children should be immunized against these diseases at 12 months of age. A second MMR vaccine is required at 4-6 years of age, before entering kindergarten. The vaccine gives long-lasting immunity (protection).





# Meningitis (Viral/Aseptic)

**Description:** Meningitis is an infection of the meninges, which are tissues that cover the brain and spinal cord, and is diagnosed by a spinal tap. Aseptic meningitis is usually caused by a virus.

**Symptoms:** Sudden onset of fever, headache, nausea or vomiting, stiff neck and irritability. The infection usually lasts seven to 10 days and complications seldom arise. Viral meningitis is not usually life threatening for most healthy adults and children.

**How it is Spread:** It is usually spread through contact with stool or respiratory droplets.

**Incubation Period:** Two to 21 days; varies depending on the type of virus.

**How Long Can a Person Spread the Infection To Others?** A person with viral/aseptic meningitis is most infectious seven to 10 days before and after onset of symptoms. The virus may be excreted in the stool for one to two months after the illness.

**Responsibilities of Parents and Caregivers:**

- The person must be under a physician's care.
- Notify the local health department the next business day of such a case or suspected case. (See ODH Communicable Disease Chart)
- Exclude the child until the fever is gone.

**Control of Spread:**

- Strict hand washing, especially after toilet use, diaper changes, handling tissues and before meals. Help children wash their hands. Strictly follow cleaning and sanitation guidelines. Avoid sharing water or drinks.
- Observe other children for symptoms and ask parents to take child to doctor immediately if symptoms develop.

**Treatment:** The person must be under a physician's care. A physician's diagnosis is essential to determine the agent causing the infection. There is no specific treatment other than for symptoms. More serious cases may require hospitalization for treatment of symptoms.



# Meningitis (Bacterial)

**Description:** Meningitis is an infection of the meninges, which are tissues that cover the brain and spinal cord. The two most common types of bacteria that cause meningitis are *Streptococcus pneumoniae* and *Neisseria meningitidis* and *meningococcal* meningitis. It is diagnosed by a spinal tap and blood test. Early diagnosis is very important.

**Symptoms:** May include fever, loss of appetite, nausea or vomiting, headache, stiff neck and irritability. Older children may experience irritability, confusion, drowsiness, stupor and coma. Younger children and infants may have non-specific symptoms and include irritability, poor feeding and fever. They may have a high-pitched cry, bulging of the soft spot and convulsions. Often an infected child has recently had a cold or ear infection.

**How it is Spread:** It is spread by direct contact with droplets and discharges from the nose and throat. It usually requires several hours of contact with an infected person to become infected with the bacteria.

**Incubation Period:** One to 10 days, usually less than four days.

**How Long Can a Person Spread the Infection to Others?** It can be spread as long as organisms are present in the nose and throat. A person is not contagious after taking effective antibiotics for 24-48 hours. Some people do not become ill from the bacteria, but are able to spread the germs to people who can become sick.

**Responsibilities of Parents and Caregivers:**

- Notify the local health department immediately (See ODH Communicable Disease Chart).
- Inform parents immediately if their child has symptoms. Parents should then consult their physician immediately.
- Notify parents of contacts that their child was exposed. Information is available from the local health department that explains meningitis and recommendations for preventive measures.

**Control of Spread:**

- A child must be under medical care.
- A child with bacterial meningitis will be hospitalized. He/she may return to child care after antibiotic treatment and a written release from the doctor.
- For meningococcal meningitis, an antibiotic medication is usually recommended as a preventive measure for contacts who were exposed to the infected child.
- Good hand washing procedures should be followed.

**Treatment:** A child with bacterial meningitis will be hospitalized and treated with antibiotics.

**Comments:** Meningitis caused by *Haemophilus influenzae* type B (Hib) can be prevented by the Hib vaccination in children under age 5. The vaccine should be given at 2, 4, 6 and 15 months of age. Instruct parents to contact their physician or local health department regarding this immunization. Some cases of meningococcal meningitis can be prevented by vaccine, given to children at high risk for disease and also to adolescents and young adults.



# MRSA

**Description:** MRSA is methicillin-resistant *Staphylococcus aureus* a potentially dangerous type of staph bacteria that are resistant to certain antibiotics and may cause skin and other infections.

**Symptoms:** MRSA skin infections can occur anywhere on the body. Some common sites are the legs, buttocks, groin and back of the neck. MRSA usually appear as a bump or infected area that is red, swollen, painful, warm to the touch or full of pus. If these symptoms appear, it is important to cover the area with a bandage and have a medical evaluation. It is especially important to contact a health care professional if the signs and symptoms are accompanied by a fever.

**How It is Spread:** You can acquire MRSA through direct contact with an infected person or by sharing personal items, such as a towel or wash cloth.

**Incubation:** Symptoms may occur within a day after contact with the infection.

## Responsibilities of Parents and Caregivers

- Exclude until 24 hours after treatment has begun or a doctor's note is provided.
- Wounds with drainage or pus must be covered at all times with a clean, dry bandage until healed.
- Know the signs of MRSA skin infections and get medical treatment early.
- Keep cuts and scrapes clean and covered.
- Encourage good hygiene such as cleaning hands regularly.
- Discourage sharing of personal items such as towels or combs.

## Control of Spread:

- **Cover the Infection.** Pus from an infected area can contain regular staph or MRSA, so keeping it covered will help prevent spreading the infection to others. Wounds with drainage or pus must be covered at all times with a clean, dry bandage until healed. Follow the health care professional's instructions about proper care of the infection. Be sure to discard bandages in the trash.
- **Clean hands.** Clean hands frequently with soap and water especially after changing the bandage or touching the infected area.
- **Do not share personal items.** Avoid sharing personal items such as towels, washcloths or clothing that may have had contact with the infected area or bandage. Wash soiled sheets, towels and clothes with water and laundry detergent. Use a clothes dryer to dry clothes completely.
- **Exclude** from school or child care until under treatment for 24 hours or a doctor's note is provided. Wounds with drainage or pus must be covered at all times by clean, dry bandages until healed.

**Treatment:** Treatment for MRSA skin infections may include having a health care professional drain the infection and, in some cases, prescribe an antibiotic. If an antibiotic is given, be sure to take all of the doses unless the healthcare professional tells you to stop taking it. Do not share antibiotics with other people or save them to use later.

**Comments:** The four steps listed in "Control Measures" can prevent and reduce the spread of MRSA and other staph skin infections.

For more information, call 1-800-CDC-INFO or visit the CDC Web site <http://www.cdc.gov/MRSA> or the Ohio Department of Health Web site (<http://www.odh.ohio.gov/healthresources/infectiousdiseasemanual.aspx>)



# Mumps

**Description:** Mumps is caused by a virus. Complications can occur, including inflammation of the spinal cord and brain, sterility or death (rare).

**Symptoms:** When present, symptoms include swelling of one or both of the salivary glands (under the jaw or in front of the ear), fever, chills and headache. Approximately 30 percent of the cases will have only mild symptoms or no symptoms at all. In teenage and adult males, tenderness in the testicles may also occur. Teenage and adult females may have some lower abdominal pain.

**How it is Spread:** It is spread by contact with droplets from the sneeze or cough of an infected person or contact with saliva. Spread can also occur if the infected person contaminates his hands with saliva or nasal secretions and then touches items that others may then touch.

**Incubation Period:** Twelve to 25 days; usually 16-18 days.

**How Long Can a Person Pass the Infection To Others?** The infection can be spread to others up to six days before swelling of the glands begins and up to five days after the onset of swelling.

**Responsibilities of Parents and Caregivers:**

- Notify the local health department. (See ODH Communicable Disease Chart)
- Parents should notify caregiver about their child's infection.
- Notify parents of children exposed and all children in the programs who have not been immunized.

**Control of Spread:**

- The child must be excluded from child care for five days following onset of parotid swelling.
- Make sure all children and adults follow good hand washing practices.

**Treatment:** None.

**Comments:** Children should be immunized at 12 months of age along with the measles, mumps and rubella (MMR) vaccine. A second dose is given at admission to school. The vaccine provides long-term immunity. Illness provides lifelong immunity.



# Pinworms

**Description:** Pinworms are small white worms about half inch long and as thin as a thread. These worms live in the large intestine. The adult female crawls out of the rectal opening at night and lays her eggs on the skin around it. The eggs cause the child to itch and scratch.

**Symptoms:** Itching around the rectum (worse at night), disturbed sleep and irritability.

**How it is Spread:** Pinworms are spread when a person who has them scratches around the anal area and gets the eggs on his hands. The eggs are then taken into someone else's mouth. The person with pinworms can re-infect himself also. Pinworms can also be spread by clothing or bedding contaminated with eggs of the parasite.

**Incubation Period:** Two to six weeks.

**How Long Can a Person Pass the Infection To Others?** The infection can be spread to others as long as the worms are present.

**Responsibilities of Parents and Caregivers:**

- If you have difficulty controlling the spread (i.e., cases continue to occur), call the local health department for assistance.
- Notify all parents of illness and possible symptoms.

**Control of Spread:**

- Allow the child to return to the child care environment after treatment. The child should receive medical attention.
- Make sure children wash their hands after toilet use. If the child is too young to do so, wash his hands for him.
- Wash bedding/clothing in hot water.
- Do not allow sharing of bed clothing.

**Treatment:** A single-dose medication is given to treat pinworms, and is repeated two weeks later.



# Polio

**Description:** Polio is caused by the polio virus. It gains entry to the body by fecal-oral spread and can infect the intestinal tract. It can be excreted and may be spread through the feces. Polio attacks the nervous system and can cause paralysis in legs or other parts of the body. Polio is still common in other parts of the world where many people remain unvaccinated. Because of widespread use of polio vaccine, the United States has not had a naturally occurring case of polio in more than 20 years.

**Control:** All children should be immunized against polio with doses of the polio vaccine (IPV) at 2, 4 and 6 months and at 4 to 6 years of age.



# Respiratory Syncytial Virus (RSV)

**Description:** RSV causes infections of the upper respiratory tract (like a cold) and the lower respiratory tract (like pneumonia). It is the most frequent cause of lower respiratory infections, including pneumonia, in infants and children under 2 years of age.

Almost 100 percent of children in child care get RSV in the first year of their life, usually during outbreaks during the winter months.

**Symptoms:** In most children, symptoms appear similar to a mild cold. About half of the infections result in lower respiratory tract infections and otitis media. An RSV infection can range from very mild to life threatening or even fatal. Children with heart or lung disease and weak immune systems are at increased risk of developing severe infection and complications. RSV causes repeated symptomatic infections throughout life.

**How it is Spread:** RSV is spread through direct contact with infectious secretions such as by breathing them in after an infected person has coughed or by touching a surface contaminated by infected person.

**Incubation period:** One to 10 days.

**How Long Can a Person Pass the Infection to Others?** A young child with RSV may be infectious for one to three weeks after symptoms subside.

**Responsibility of Parents and Caregivers:** The most effective preventive measure against the spread of RSV infections and other respiratory viral infections is careful and frequent hand washing. Once one child in a group is infected with RSV, spread to others is rapid. Frequently, a child is infectious before symptoms appear. Therefore, an infected child does not need to be excluded from child care unless he or she is not well enough to participate in usual activities.

**Control:** If a child or adult in the child care facility develops an illness caused by RSV infection:

- Make sure procedures regarding hand washing, hygiene, disposal of tissues used to clean nasal secretions and cleaning and sanitation of toys are followed.
- Do not allow children to share cups, utensils, glasses.
- If multiple cases occur, grouping or separating ill children from well/recovered children may help to reduce the spread of RSV. Do not exclude ill children unless they are unable to participate comfortably in activities or require a level of care that would jeopardize the health and safety of the other children in your care.

**Treatment:** For children with mild disease, no specific treatment is necessary other than the treatment of symptoms. Children with severe disease may require hospitalization.



# Ringworm

**Description:** Ringworm is a fungus infection that lives on the skin, scalp or feet (athlete's foot).

**Symptoms:** Symptoms include scaly patches of temporary baldness (ringworm of the scalp), flat inflamed, ring-like rash that may itch or burn (ringworm of the skin) and scaling or cracking of the skin (ringworm of the feet).

**How it is Spread:** It is spread by direct skin-to-skin contact with an infected person or indirect contact through objects such as combs, locker rooms and showers contaminated by infected persons or animals.

**Incubation Period:** Ten to 14 days for the skin; four to 10 days for the body.

**How Long Can a Person Pass the Infection to Others?** The infection can be spread to others as long as rash/sores are present and have not been treated with the appropriate medication.

**Responsibilities of Parents and Caregivers:**

- Ask parents to notify caregiver of illness.
- Notify parents if contacts develop symptoms.

**Control of Spread:**

- Exclude until 24 hours of appropriate treatment is complete.
- Follow policies for cleaning and sanitizing.
- Don't share grooming/personal items such as combs.
- Advise parents that family members and pets may need to be treated.
- Do not cut child's hair or make him wear a cap during treatment.
- Exclude from activities that involve direct skin-to-skin contact (contact sports) or swimming until the lesions are gone.

**Treatment:** Antifungal medication prescribed by a physician.





# Rocky Mountain Spotted Fever

**Description:** Rocky Mountain spotted fever is an infection caused by bacteria. It is diagnosed by signs and symptoms and a blood test.

**Symptoms:** The initial symptoms may include: fever, severe headache, nausea, muscle pain, vomiting, lack of appetite. Later signs and symptoms include: rash, joint pain, abdominal pain, diarrhea.

Although not every case will have a rash, a person with RMSF will often exhibit a fever, rash and history of a tick bite.

**How it is Spread:** RMSF is not spread person to person. It can be caught only by the bite of certain types of ticks. These ticks live in wooded areas and areas with high grass. Animals such as dogs and cats can carry the ticks home. In contrast to Lyme disease, the tick that carries RMSF is very common in Ohio.

**Incubation Period:** Five to 10 days after a tick bite or handling an infected tick.

**How Long Can a Person Spread the Infection to Others?** RMSF cannot be spread from one person to another.

## Responsibilities of Parents and Caregivers:

- Report RMSF to the local health department. They will probably already know about it; the blood tests are performed at the ODH.
- If a child is bitten by a tick or a tick is found on the child's body, be sure to tell the parents. If the child becomes ill, the parents can tell the doctor so that RMSF can be considered.

**Control of Spread:** The ticks that carry RMSF are common in Ohio. Though this does not mean all ticks are infected, you should take the following precautions just in case:

- Keep the yard and play area mowed.
- Do not allow children to play in tall grass.
- Check children's bodies and scalp (and your own) thoroughly for ticks if you have been on a field trip through woods or tall grass.
- If you find a tick, use tweezers to grasp the tick as close to the skin as possible. Slowly pull the tick straight out. Do not use hot matches, cigarettes, alcohol or nail polish. Put the tick in a small container of alcohol and throw in the trash can. Wash your hands and the bite site thoroughly.

**Treatment:** Only a doctor can diagnose RMSF. It is easily treated with antibiotics, especially when found early.



## Rubella (German Measles, 3-day Measles)

**Description:** Rubella is a mild viral disease that is confirmed only by a laboratory test or by a link to a lab-confirmed case. Rubella usually causes mild illness in children. However, infants born to women who were infected with rubella during the first 12 weeks of pregnancy are at risk for severe birth defects.

**Symptoms:** Symptoms include low-grade fever, headache, sore throat, cough and general body rash. The first sign of the childhood illness may be swollen glands, usually at the back of the skull and behind the ears, followed by a rash. The rash usually consists of pink, isolated spots that appear first on the face, then spread rapidly to the trunk, upper arms and upper legs. The rash fades rapidly and is usually gone within three days.

**How it is Spread:** It is spread through droplet contact (sneezing or coughing) from nose and/or throat secretions of infected person or from items contaminated with nasal discharges from an infected person.

**Incubation Period:** Twelve to 23 days, usually 16-18 days.

**How Long Can a Person Pass the Infection to Others?** The infection can be spread to others up to seven days before and seven days after appearance of rash.

### Responsibilities of Parents and Caregivers:

- Notify the local health department. (See the ODH Communicable Disease Chart)

### Control of Spread:

- Rubella is a very serious disease in pregnant women. Any person with rubella must be excluded from attending or working in the child care setting for at least seven days after the onset of rash in accordance with rules of the local and state health departments. Contact parents of children not immunized.
- Persons with **congenital** rubella shall be excluded from school or child care until they are one year old unless nasal and urine cultures after three months of age are repeatedly negative for rubella.

**Treatment:** None.

### Comments:

- Children should be immunized at 12 months with measles, mumps and rubella (M-M-R) vaccine and a second dose prior to school entry between 4-6 years of age. Both the vaccine and infection provide long-term immunity.
- Immunization after exposure will not necessarily prevent infection or illness resulting from that exposure. Pregnant women should not receive a rubella vaccine.



# Scabies

**Description:** Scabies is a skin disease that is caused by a mite, which is an almost invisible organism. The mite lives on the surface of human skin. The female mite burrows (digs a hole) into the skin to lay eggs. The path where the mite burrows may look like a tiny scratch mark.

**Symptoms:** Symptoms include a patchy red rash with thread-like tracks. The rash usually occurs between the fingers, the inside surfaces of the wrists and forearms, the elbows, under the armpits, waist, thighs, genital area and lower buttocks. The infested areas usually itch intensely, especially at night.

Diagnosis is made by a physician scraping a few tiny specks of skin from an itch area and looking at the skin scraping under a microscope.

**How it is Spread:** Spread occurs by skin-to-skin contact or contact with undergarments or bedclothes that have been freshly contaminated by an infested person. Pets do not transmit the mite.

**Incubation Period:** Two to six weeks for individuals not previously exposed to scabies, one to four days for individuals previously exposed (re-infested).

**How Long Can a Person Spread the Infection to Others?** The infestation can be spread at the beginning of the infestation even before symptoms and until the mites and eggs are destroyed by treatment.

## Responsibilities of Parents and Caregivers:

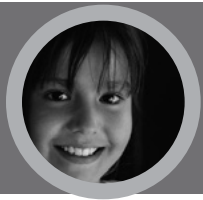
- Caregivers should notify parents of exposure to and symptoms of scabies.

## Control of Spread:

- Exclude or isolate infested people from other children. They may return on the day following the first treatment.
- Wash or dry clean clothing and bed linen used within the 48 hours prior to the beginning of treatment. The eggs and mites are killed by water temperatures above 120°F for five minutes or longer. Items that can not be washed or dry cleaned should be placed in a sealed plastic bag for three to four days.
- Vacuum or gently iron bed mattresses and upholstered furniture.
- It is not necessary to spray, fumigate or otherwise chemically treat the home or child care center, as this is not effective.
- Notify the local health department of outbreaks, unusual incidence or an epidemic of the condition. (See the ODH Communicable Disease Chart)

**Treatment:** Proper treatment involves the use of a prescription medication such as Kwell lotion. The lotion should be applied in a thin coat to the entire body from the jaws down. Special attention must be paid to covering all the skin folds and creases and to the areas under the nails. A person may need to be retreated in seven to 10 days to kill any newly hatched mites. Because scabies is highly contagious, family members and caregivers should be treated as well. A physician should be consulted before treating a child less than age 2. Itching may continue for one to two weeks after treatment

**Comments:** People of all ages, sex, race and socioeconomic background can get scabies. Scabies is not a sign of poor personal hygiene.



# Sickle Cell Disease

**Description:** Sickle cell disease is an inherited blood disorder that affects a part of the red blood cell called hemoglobin. Hemoglobin is the part of the red blood cell that carries oxygen to different parts of the body. A person with sickle cell disease makes a different kind of hemoglobin called “sickle” hemoglobin. Instead of being round and smooth, cells with sickle hemoglobin become hard and sticky and look like a banana or sickle. These cells have trouble moving through small blood vessels.

Sometimes they clog up these blood vessels preventing the blood from bringing oxygen to the tissues. This can cause pain or damage to the areas that are not getting oxygen.

Although children are born with the disease, the symptoms usually do not appear until after 6 months of age. Sickle cell disease can cause many kinds of problems.

Some of the most common problems are infections, pain and anemia. Every child who has sickle cell disease is at risk for these problems, but not everyone who has sickle cell disease will actually have all of these problems.

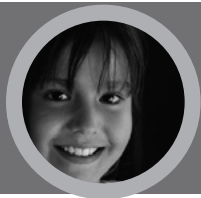
Life-threatening infections are one of the most serious problems children with sickle cell disease can have. These infections occur because the spleen does not work well in children with sickle cell disease. The spleen is an organ in the body that works to help the body kill germs. The sickle cells clog and damage the spleen so it can't do its job. Parents should be informed immediately if their child has a temperature of 100°F (axillary) or if their child appears ill.

Pain is caused by the sickle cells getting stuck and blocking blood vessels. This cuts off the blood supply to nearby tissues. When this happens, the cells can't get through to bring oxygen and the area starts to hurt. Most pain is mild enough that it can be treated at home with increased fluids, heat or massage to the area and oral medicines such as Tylenol, Ibuprofen or Tylenol with codeine. Sometimes sickle cell pain may be very bad and will need to be treated in the hospital with stronger medicines. Parents should be informed if the child shows any signs of pain.

Sickle cells do not live as long as normal red blood cells because of their abnormal shape. This decreases the number of red blood cells and the amount of hemoglobin in the body. This low blood count is called “anemia.” Most children adjust to this anemia and it usually does not need to be treated. You may notice children with sickle cell disease become tired more easily than other children. Children with sickle cell disease should be encouraged to drink plenty of fluids and to take rest breaks when tired, but otherwise should not be treated differently than other children. Parents should be informed of any increase in fatigue.

**Responsibilities of Parents and Caregivers:** Parents should be informed immediately if:

- Child has a temperature of 100°F (axillary) or if their child appears ill.
- Child shows any signs of pain.
- Child has any increase in fatigue.
- Child care setting should have a Medical/Physical Care Plan for the child which describes the responsibilities of the program as well as the parent.



# Scarlet Fever/"Strep Throat"

**Description:** "Strep" throat is a bacterial infection that is confirmed by a laboratory test of discharge from the throat. Not every sore throat is strep. Scarlet fever is a combination of strep throat and a skin rash, but it is no more serious than strep throat without a rash. Rheumatic fever (affecting the valves of the heart); however, is a serious complication that can be prevented by prompt appropriate treatment of strep throat.

**Symptoms:** Symptoms of strep throat include fever, sore throat and oozing and redness of the tonsils and throat. Symptoms of scarlet fever include the same symptoms with a sandpaper-like rash.

**How it is Spread:** Strep throat is spread by inhaling respiratory droplets from an ill person. Spread is usually by direct contact with nose and throat secretions from an infected person. Rarely, it may be spread indirectly by contact with hands or objects (such as drinking cups or eating utensils) contaminated with nose or mouth discharges of an infected person.

**Incubation Period:** Usually one to three days.

**How Long Can a Person Pass the Infection to Others?** The infection can be passed for about 24 hours after adequate treatment begins.

## **Responsibilities of Parents and Caregivers:**

- Routine screening of all children and employees of the child care facility is not recommended, unless evidence of an ongoing outbreak is apparent as determined by the local health department or unless strep kidney disease has occurred.
- Ask parents to notify the caregiver about their child's infection. They should not transfer the child to another child care facility.

## **Control of Spread:**

- Send home a child who has symptoms. The child should be taken to a doctor. If strep throat is diagnosed, the child may return 24 hours after antibiotics have been started.
- Avoid excluding a child who does not have symptoms, even though she may have a positive throat culture.
- Good personal hygiene practices should be followed. Cover the nose and mouth when coughing or sneezing. Dispose of soiled tissues after wiping a runny nose. Always follow with proper hand washing. Do not share eating utensils, food or drinking cups. Sanitize toys mouthed by infants and toddlers.
- Notify other parents so they can observe their children for signs of infection.
- Observe other children for symptoms of infection.

## **Treatment:**

- Penicillin or other effective antibiotics as prescribed by a doctor.
- To prevent potential complications such as rheumatic fever, antibiotics should be completed as prescribed.



## Sudden Infant Death Syndrome (SIDS)

SIDS is a term used to describe the sudden, unexplained death of an infant that remains unexplained after a thorough case investigation that includes a complete autopsy, an examination of the death scene and a review of the clinical history. SIDS is the leading cause of death of children 1 month to 1 year of age. In the United States, approximately 2,500 infant deaths are attributed to SIDS each year. Many (nearly 20 percent) of these occur in the child care setting.

The cause of SIDS is unknown. SIDS is not contagious. SIDS is not caused by vomiting, choking or minor illnesses such as colds or infections. Deaths due to vaccine reactions or child abuse are not classified as SIDS deaths. While we don't know what causes SIDS, some factors that are associated with increased risk of SIDS are:

- 1.) Placing a baby on the stomach (prone position) to sleep, especially if the baby is not used to tummy sleeping.
- 2.) Being exposed to tobacco smoke during pregnancy and after birth.
- 3.) Using soft surfaces and objects that trap air or gases such as pillows, in a baby's sleeping area.
- 4.) Not breastfeeding a baby. However, risk factors alone do not cause SIDS. Most babies with one or more of the above risk factors do not succumb to SIDS.

### **To decrease the risk of SIDS in the child care setting**

- Always place babies on their backs to sleep, unless the child's physician has written and signed a note stating the medical reason for why the baby should not sleep on his or her back.
- Place babies in a safety-approved crib with a firm mattress to sleep. Adult beds, water beds, sofas and chairs are not safe because infants can accidentally suffocate. Place only one baby in a crib at a time.
- Remove soft, fluffy bedding and toys such as pillows, bumper pads, comforters and stuffed animals. These soft items can interfere with a baby's ability to breathe if they get near his or her face.
- If blankets are used, follow the "feet-to-foot" rule. Place the baby in the crib with his or her feet at the foot of the crib. Tuck a light blanket in along the sides and foot of the mattress, with the blanket coming up no higher than the baby's chest.
- Provide supervised "tummy time" when infants are awake. This helps babies to strengthen their head and neck muscles. Never leave babies unattended on their tummies, though, unless they are able roll back and forth on their own.
- Don't smoke; provide a smoke-free environment for babies in your care; encourage parents who smoke to quit. Babies whose mothers smoked during pregnancy are three times more likely to die of SIDS. Babies exposed to secondhand smoke are at 2.5 times the risk.
- Encourage mothers who breastfeed to provide you with bottled breast milk that is clearly labeled with their child's name. Studies show babies who died of SIDS were less likely to have been breastfed. Breastfeeding also prevents gastrointestinal and respiratory illnesses and infections.

**If a child in your care is not breathing and is unresponsive:**

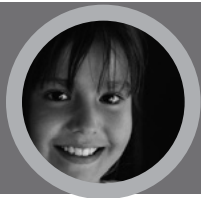
- Call 911.
- Begin rescue breathing/CPR.
- Immediately notify the child's parents.

**If a child in your care dies:**

- Do not disturb the scene of death (i.e., don't move anything), if possible.
- Get help to care for the other children.
- Call the parents of the other children.
- Document the entire sequence of events.
- Notify your licensing and/or certification agency and insurance agency.
- Prepare to talk with law enforcement officers, a coroner or medical examiner and licensing and insurance agencies.

**If the death of a child in your care is attributed to SIDS:**

- Seek support and SIDS information from your local health department or from local, state or national SIDS resources.
- Provide information on SIDS to families in your program, including age-appropriate resources for children.
- Offer support resources for families, such as counseling services, publications, Web sites, support groups, etc. For additional information on SIDS, including free prevention materials and support resources, contact:
  - National Institute of Child Health & Human Development Back to Sleep campaign  
1-800- 505-CRIB (2742)  
<http://www.nichd.nih.gov>
  - American Academy of Pediatrics 1-888-227-5409 or 847-434-4915  
<http://www.healthychildcare.org>
  - CJ Foundation for SIDS 1-888-8CJ-SIDS (825-7437)  
<http://www.cjsids.com>
  - National SIDS/Infant Death Resource Center 1-866-866-7437  
<http://www.sidscenter.org>
  - First Candle/SIDS Alliance 1-800-221-7437 or 410-653-8226  
<http://www.sidsalliance.org>
  - Sudden Infant Death Network of Ohio 1-800-477-7437  
<http://www.sidsohio.org/>



# Tetanus

**Description:** Tetanus, also called lockjaw, is caused by infection with the bacteria *Clostridium tetani*. These bacteria are common in the soil but are quickly killed by oxygen. Any wound or cut contaminated with the soil and not open to the air (such as a puncture wound or even a rose prick) will provide a suitable environment for the bacteria.

Tetanus is very rare in the United States due to the very high immunization rates of persons living here. Tetanus is difficult to treat, but is completely preventable through vaccination.

**Symptoms:** A common first sign is muscular stiffness in the jaw (lockjaw), followed by stiffness of the neck, difficulty in swallowing, rigidity of abdominal muscles, spasms, sweating and fever.

**How it is Spread:** It is not spread from person to person. Tetanus is usually acquired when a person who has not been immunized acquires such a wound by stepping on a dirty nail or being cut by a dirty tool. The bacteria infect the wound and produce a toxin that spreads through the blood. This toxin can cause severe muscle spasms, paralysis and frequently death.

**Incubation:** Eight days but may range from three days to three weeks.

**Responsibility of Parents and Caregivers:** Children receive tetanus vaccine in combination with the pertussis and diphtheria vaccine. After childhood, adults need a booster injection every 10 years to make sure they are protected. See control measure below.

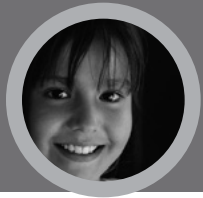
**Control Measures:**

- Anyone who has an open wound should determine the date of his or her last tetanus booster. A person who has not had a booster within the past 10 years should receive a booster dose of vaccine and/or other medications to prevent tetanus disease. For some wounds, a person may need a booster if more than five years have elapsed since the last dose. Because tetanus is not spread person to person, tetanus in one child care attendee or staff will not spread to others.

**Treatment:** Once a person develops symptoms, there is no treatment for tetanus. The best treatment is prevention with immunization.

**Comments:** The single most important preventive measure is immunization.





# Tuberculosis (TB)

**Description:** Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys or the spine. A person with TB can die if they do not get treatment.

## What is latent TB infection?

It is important to understand that not everyone infected with TB bacteria becomes sick. People who are not sick have what is called latent TB infection. People who have latent TB infection do not feel sick, do not have any symptoms and cannot spread TB to others. But some people with latent TB infection go on to get TB disease.

People with latent TB infection

- Have no symptoms.
- Do not feel sick.
- Cannot spread TB to others.
- Usually have a positive skin test reaction or QuantiFERON-TB Gold test.
- May develop active TB disease if they do not receive treatment for latent TB infection.

Many people who have latent TB infection never develop active TB disease. In these people, the TB bacteria remain inactive for a lifetime without causing disease. But in other people, especially people who have weak immune systems, the bacteria become active and cause TB disease.

## Why is Latent TB Infection Treated?

If you have latent TB infection but not TB disease, your doctor may want you to take a drug to kill the TB germs and prevent you from developing TB disease. The decision about taking treatment for latent infection will be based on your chances of developing TB disease. Some people are more likely than others to develop TB disease once they have TB infection. This includes people with HIV infection, people who were recently exposed to someone with TB disease and people with certain medical conditions.

## What is active TB disease?

TB bacteria become active if the immune system can't stop them from growing. The active bacteria begin to multiply in the body and cause active TB disease. The bacteria attack the body and destroy tissue. If this occurs in the lungs, the bacteria can actually create a hole in the lung. Some people develop active TB disease soon after becoming infected, before their immune system can fight the TB bacteria. Other people may get sick later, when their immune system becomes weak for another reason.

Symptoms of TB depend on where in the body the TB bacteria are growing. TB bacteria usually grow in the lungs. TB in the lungs may cause symptoms such as

- A bad cough that lasts three weeks or longer.
- Pain in the chest.
- Coughing up blood or sputum (phlegm from deep inside the lungs).

Other symptoms of active TB disease are:

- Weakness or fatigue.
- Weight loss.

- No appetite.
- Chills.
- Fever.
- Sweating at night.

Adults with tuberculosis disease are contagious for at least a few weeks after beginning proper treatment. Children with TB disease are not as contagious, because they usually have smaller lung lesions and do not cough as much.

Routine testing for TB is now only recommended in children who are at high risk for having the illness. Risk factors include being exposed to an infected adult, contact with someone who has been in prison, contact with the homeless and travel to countries with high TB rates, including Mexico, India, Vietnam, China, Philippines, and many countries in Latin America, Asia, the Middle East and Africa. Adopted children from any high-risk area should also be tested, including Romania and Russia.

However, a child with a positive TB skin test should be seen by a licensed clinician to rule out active TB disease and to be evaluated for medication to prevent active TB disease.

### **What is the Difference between Latent TB Infection and TB Disease?**

People with *latent TB infection* have TB germs in their bodies, but they are not sick because the germs are not active. These people do not have symptoms of TB disease, and they cannot spread the germs to others. However, they may develop TB disease in the future. They are often prescribed treatment to prevent them from developing TB disease

### **Responsibilities of Parents and Caregivers:**

- Notify the local health department.
- Exclude a person with TB until a licensed clinician approves the return to the child care setting.
- Consult with the local health department for the need to evaluate potential exposure and testing of children and/or staff.
- Persons who are newly hired as a child care provider should have a TB skin test (unless a previously positive test has been documented).
- Children with latent TB infection should not be kept out of a child care setting after active TB disease is ruled out by a licensed clinician.

**Treatment:** TB disease can be treated by taking several drugs for six to 12 months. It is very important that people who have TB disease finish the medicine, and take the drugs exactly as prescribed. If they stop taking the drugs too soon, they can become sick again; if they do not take the drugs correctly, the germs that are still alive may become resistant to those drugs. TB that is resistant to drugs is harder and more expensive to treat. In some situations, staff of the local health department meet regularly with patients who have TB to watch them take their medications. This is called directly observed therapy (DOT). DOT helps the patient complete treatment in the least amount of time.

**Additional Information online:** <http://www.odh.ohio.gov/healthResources/infectiousDiseaseManual.aspx> (last updated: 2007)



# Whooping Cough (Pertussis)

**Description:** Whooping cough is a highly contagious disease caused by bacteria. The illness may begin with cold-like symptoms that progress to a cough, or the child may simply begin coughing. After several days, severe coughing fits may cause the child to vomit after coughing or to lose his breath. Sometimes a high-pitched crowing (the whoop) is heard when inhaling. The coughing can last one to three months. Diagnosis is made by a laboratory test or by a physician. Pertussis is particularly serious in children under age 2 and hospitalization is usually necessary.

**How it is Spread:** Transmission is by direct contact with droplets from the nose and throat of an infected person.

**Incubation Period:** Commonly five to 10 days, and not more than 21 days.

**How Long Can a Person Pass the Infection to Others?** The infection is highly contagious in the early stages. The child is no longer infectious to others five days after starting antibiotic treatment.

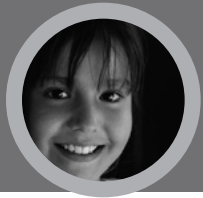
## Responsibilities of Parents and Caregivers:

- Notify the local health department if a doctor has said it is pertussis. (See ODH Communicable Disease Chart)
- Parents should notify caregiver about their child's illness.
- Caregiver should inform parents immediately if their child exhibits symptoms. Parents should then consult their doctor or clinic immediately.
- Parents of contacts should be notified of their child's exposure and advised to contact their doctor or clinic.

**Control of Spread:** Pertussis is a very serious illness. A child with pertussis must be excluded from the child care facility until after five days of antibiotics or until after three weeks after onset of intense coughing in accordance with rules of the local health department. The local health department may recommend antibiotics or booster shots of DTaP for contacts. Check non-immunized students for potential exclusion during epidemic.

**Treatment:** Antibiotic therapy.

**Comments:** Protection from whooping cough is best provided by adequate immunization with DTaP vaccine, starting at age 2 months, again at 4 months, 6 months, 15 months and age 4 to 6 years. Adults and teenagers are susceptible to the illness as well and may carry the bacteria while exhibiting only mild symptoms. Recommendations for adolescents and adults include the one time pertussis containing vaccine (Tdap).



# Yeast Infections

**Description:** Yeast infections are caused by various species of *Candida*, especially *Candida albicans*.

These organisms are part of the germs normally found in various parts of the body and ordinarily do not cause any symptoms. Certain conditions such as antibiotic use or excessive moisture, may upset the balance of microbes and allow an overgrowth of *Candida*. In most persons, these infections flare up and then heal.

However, in newborns or persons with weak immune systems, this yeast can cause more serious or chronic infections.

*Candida* may also exacerbate diaper rash, as this yeast grows readily on damaged skin. The infected skin is usually fiery red with lesions that may have a raised red border. Children who suck their thumbs or other fingers may occasionally develop *Candida* around their fingernails.

Many infants acquire *Candida* infections from their mothers during birth. Many of those that escape this infection soon acquire *Candida* from close contacts with other family members and doting relatives and friends. In older persons, treatment with certain types of antibiotics or inhaled steroids (for asthma) may upset the balance of microbes in the mouth, allowing an overgrowth of *Candida* that will also result in thrush. Outbreaks of thrush in child care settings may be the result of increased use of antibiotics rather than newly acquired *Candida* infections.

**Symptoms:** Infection of the skin, mouth or tongue that appears as white spots that can not be scraped off without causing bleeding. It may also occur in the folds of skin in the diapered areas.

**How it is Spread:** Direct contact with secretion from infected areas. Contact with stool of carriers.

**Incubation:** It is variable, for infants two to five days.

**How Long Can a Person Pass the Infection to Others?** As long as the lesions are visible.

## Responsibilities of Parents and Caregivers:

- For children with diaper rash, child care providers should change the diaper frequently, gently clean the child's skin with water and a mild soap and pat dry. While cornstarch or baby powder may be recommended for mild diaper rash, it should not be used for children with inflamed skin. High-absorbency disposable diapers may help keep the skin dry.
- Children with thrush and *Candida* diaper rash need not be excluded from child care as long they are able to participate comfortably.
- Child care providers should follow good hygiene including careful hand washing and disposal of nasal and oral secretions of children with thrush in order to avoid transmitting the infection to children who are not already infected.

**Treatment:** Oral thrush and *Candida* diaper rash are usually treated with the topical antibiotic nystatin. A corticosteroid cream can be applied to highly inflamed skin lesions on the hands or diaper areas. Medical treatment is limited by the age of the child.



John R. Kasich, Governor  
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